expert.ai INTELLIGENCE PLATFORM: "KNOW YOUR CUSTOMER" BETTER

"Know Your Customer," often abbreviated as KYC, refers to the set of policies, processes and applications that organisations like banks, financial intermediaries and insurance companies use to verify the actual identity of their customers and assess the risks associated with the involvement of the same - or counterparties with whom the customers operate - in illegal or suspicious activities related to financial crimes, money laundering, financing terrorist organisations, etc.

For several years now, sector operators have access to various tools and applications to support analysts in charge of Anti-Money Laundering (AML) and financial crime control processes: specialised databases and software for Risk Intelligence activities, online news archives, services provided by specialised information providers and Internet search engines such as Google.

Despite these tools and the enormous human resources costs, the risk of being unable to intercept and prevent potentially critical situations in time remains high. The reputational implications of indirect involvement in illegal activities and hefty fines are not just a possibility but a reality.

One of the critical points of KYC processes is the effective detection of so-called "bad news" concerning both new and existing customers. While many financial institutions have been equipped for decades to systematically analyse numerical, quantitative and transactional information, they are not as effective when it comes to the capture, analysis and selection of news and information from the web.

The current process of search and analysis of "bad news" requires Anti Money Laudering (AML) operators to perform a keyword search on the web manually- and subscription-based sources (e.g. Google Search, Dow Jones Factiva, etc.). This process is costly: the average search and analysis of any "bad news" on a particular subject take about 60 minutes.

 "Bad news" sources archives already exist on the market where you can search for specific people or companies. However, search tools based on keywords within these platforms, make the search activity particularly arduous and complicated. Such a process—which relies on manual execution of search and depends on subjective decision making—also generates a high number of false positives.

All this considered, it is not unusual for AML specialists to spend a large amount of time on Google or other search engines to identify relevant news, especially in the face of rumors or breaking news about a customer that is quickly going viral.

expert.ai responds to these specific needs by automating the process of search and analysis of "bad news" to reduce both time and errors, as well as the overall commitment necessary for such activities. expert.ai has been designing and developing Artificial Intelligence software for text analysis and understanding of natural language for over 20 years. Thanks to the unique semantic technology of the expert.ai, the Finance and Intelligence sector with a sophisticated solution designed specifically to identify and report the "bad news" of fundamental importance for a truly effective KYC process.

expert.ai
INTELLIGENCE PLATFORM

expert.ai Intelligence Platform (CIP) is an Artificial Intelligence software platform that allows you to collect, catalog and filter large amounts of news, documents and information in text format. CIP provides advanced search and alerting capabilities based on technology that is more effective than traditional search engines based on keywords.

The solution is a powerful support for all intelligence activities from open sources (**OSINT: Open Source INTelligence**) necessary for modern organisations to make decisions based on knowledge of the facts. Thanks to expert.ai Intelligence Platform, companies can constantly monitor and follow the evolution of phenomena of strategic interest, keeping a large mass of information under control with minimal effort.

expert.ai:
THE SEMANTIC TECHNOLOGY

The sophisticated analytical capabilities of **expert.ai Intelligence Platform** derive from the complete integration with **expert.ai**, expert.ai's patented linguistic platform, which constitutes a set of proprietary technologies and resources resulting from hundreds of man/years of research and development.

expert.ai intelligently processes the knowledge contained in texts written in everyday language for the extraction of meanings, understanding of natural language, translation, sharing and the circulation of knowledge.

Just as a human being would do, expert.ai interprets the concepts contained in texts: through the most advanced linguistic technologies, the software captures all the **structural**, **lexical** and **semantic** aspects of a text through an in-depth analysis and disambiguation of all the elements it meets, applying a rich representation of the real-world knowledge.

expert.ai outperforms other approaches to automatic processing by truly processing knowledge in documents. It does not superficially examine a set of words and character. Instead, it disambiguates the meaning of any text by querying the expert.ai **Knowledge Graph** in real-time. The Knowledge Graph is a semantic network that contains millions of information connections on terms, concepts, abbreviations, phraseologies, meanings, domains of membership and relationships between these terms.

The expert.ai Knowledge Graph has been pre-trained and enriched over the years. Thanks to a combination of activities by our knowledge engineers and patented algorithms, expert.ai can analyse texts written in **14 different languages.** It offers a much more accurate level of understanding of documents in **English** than alternative solutions based exclusively on ML algorithms that must be trained from scratch with large amounts of examples.

expert.ai has a flexible architecture with features that meet specific needs expressed by companies. The platform implemented is exceptionally efficient, equipped with a high speed of execution in treating large volumes of data and texts.

COMPONENTS OF expert.ai INTELLIGENCE PLATFORM

The main components of the solution are:

- the **source management module,** which allows you to quickly and intuitively define all the information sources—websites, internal databases and document archives—that will form the knowledge base of the system;

- The **categorisation engine**, which allows categorisation of the acquired documentation according to standard taxonomies or those specifically developed for customers;

- The **extraction engine**, which allows recognition of all entities identified within documents, such as people, companies, organisations, locations, etc.;

- The **search and analysis engine**, through which users utilise all the information extracted from the semantic engine to identify the information of interest quickly;

- The **Target Management module**, a vertical application of the search engine designed to evaluate the reputation of counterparties such as suppliers, customers or partners.

SOURCE MANAGEMENT

The solution allows the automated capture of documents, news and information from hundreds or thousands of different open data sources such as websites, RSS feeds, news sites, social media and email.

In addition to open data sources, the system can be integrated with internal document data sources and existing information databases through customisable connectors.

The solution also includes Meta-Search functions, which enable an analysis of Googlesearch results, even using complex syntax.

CATEGORISATION TAXONOMIES

All content acquired by the platform can be automatically classified based on one or more standard or customised taxonomies, and on the needs of each customer: the platform can incorporate a series of taxonomies to classify content on the basis of semantic criteria defined according to specific use cases.

Standard taxonomies available within the platform include the following:

- **Crime taxonomy**. The "crime" domain, strongly bound by national legal provisions, has been analysed from an international point of view and broken down into macro-themes common to the European legal codes. This includes a domain-specific taxonomy composed of about 60 categories that organises the main macro-typologies of crime and illicit activity in a logical-herarchical structure;

- **Finance taxonomy**. The taxonomy classifies information of over 170 categories concerning financial news, markets, macroeconomics, institutions and rating agencies, currencies, etc.;

- **Cyber Crime taxonomy**. Taxonomy of 42 categories of cybercrime, subdivided by type of attack and by type of device / asset (hw, sw, mobile,network, etc.) used and object of the attack;

- **Mediatopics taxonomy**. The taxonomy is based on the IPTC taxonomy (www.iptc.org), which is specific for the domain of journalistic informationand covers about 800 categories;

- **Geographic taxonomy.** Taxonomic structure composed of 250 categories, where each category represents a country. The categorisation engine, developed from the taxonomy, natively assigns a category when it finds at least one geographical entity in documents associated with that country in the semantic network.
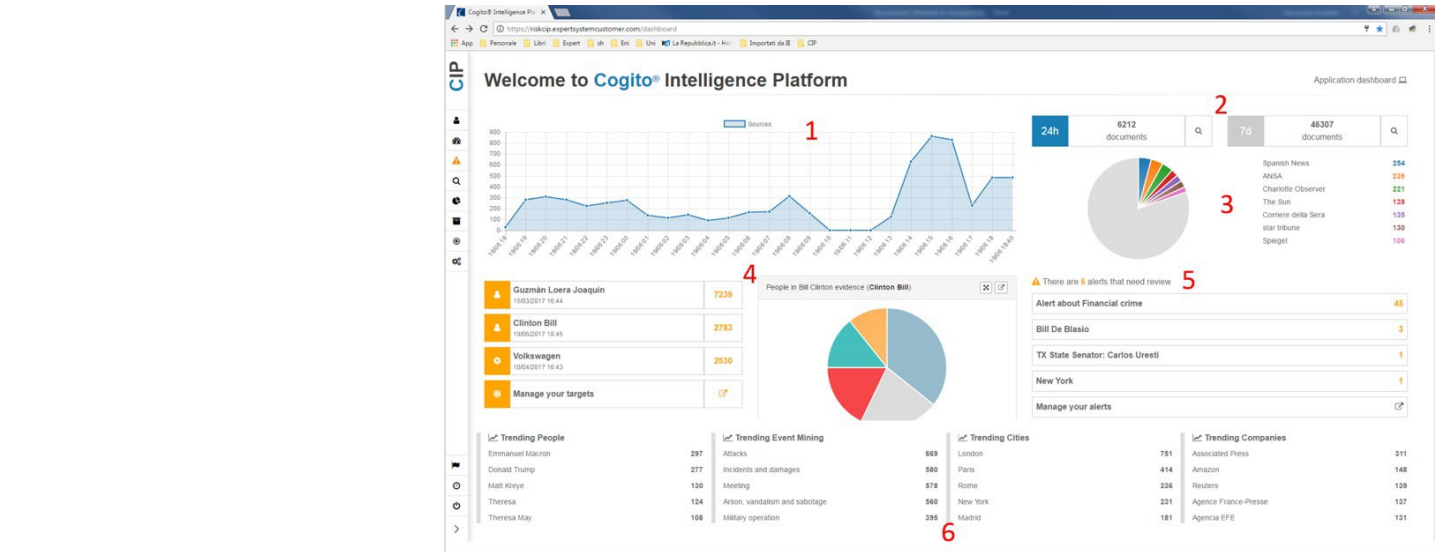
ENTITY EXTRACTION

In parallel with the automatic categorisation activity, expert.ai Intelligence Platform can analyse the content of documents to identify a series of structured or unstructured information contained within.

This Text Mining activity allows the product to identify and extract names, locations, organisations and other custom entities of interest to the customer.
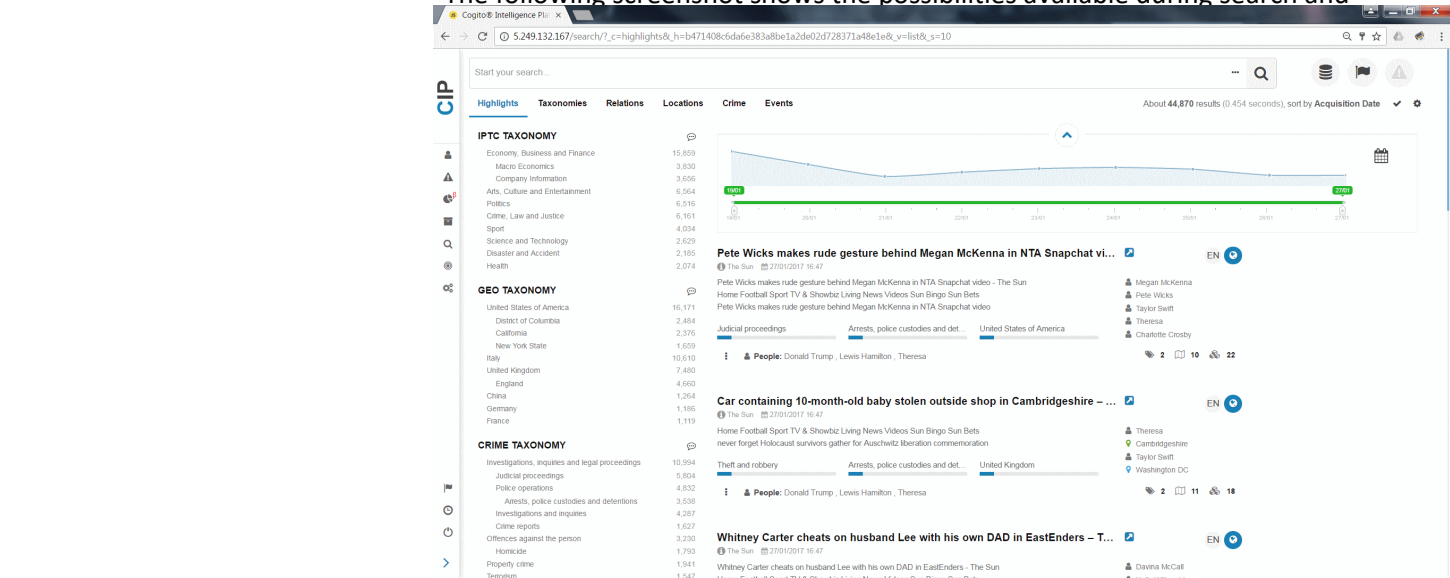
SEARCH ENGINE AND ANALYSIS:

All extracted information is automatically indexed by the platform and becomes the key to the search, filter and analysis activities carried out by end users.

The expert.ai Intelligence Platform includes a sophisticated web Dashboard, throughwhich users can perform interactive research and analysis. Below is an example screen.

The Dashboard presents the temporal distribution of content acquired by the system, the most recent information received, the distribution of the original sources of content, the presence of information related to cases and targets under analysis, the alerts automatically generated by the system and the most relevant "trending topics."

The following screenshot shows the possibilities available during search and

The application allows you to filter documents through keywords, concepts, multiple taxonomies and over a period of time.

A summary, the most significant categorisation information and the entities identified within the document is presented for each document.

All search and selection filters set during navigation can be saved and transformed into **automatic alerts**, enabling proactive notification whenever the system acquires information of interest.

TARGET MANAGEMENT

One of the most frequent use cases for expert.ai Intelligence Platform is counter-party reputational assessment, the collection and correlation of information involving a customer, supplier, business partner, etc. whenever it emerges from source,

This activity allows analysts to qualify the reputation and risk profile of subjects under analysis to determine whether or not to establish a business relationship or to implement risk mitigation strategies. This can occur during the start-up phase of new business relationships and in subsequent periods, when controls are likely to happen less frequently or are carried out only when evidence of illegal or potentially illegal behavior has already become apparent.

The interaction with the 'Target Management' module can be summarised in three distinct operational phases.

TARGET DEFINITION

Thanks to integration with leading commercial information providers, **expert.ai Intelligence Platform** can integrate and expand the definition of a company to all stakeholders as well as to all entities referenced in incorporation documents, whether they are partners, senior figures or legal representatives.
In this way, the system creates a **Target**, a perimeter that includes all the entities—organisations or people—whose reputation has a direct impact on the reputation of the company under attention.

DEFINITION OF CRITERIA OF INTEREST

After defining the perimeter of the analysis target, the software allows you to indicate the topics, i.e. the elements present in the taxonomies that the system uses to automatically classify the information, on which you want to receive alerts and reports.

ALERTS AND EVIDENCE ANALYSIS

At the end of the two previous phases, the engine is able to start its analysis within the reference knowledge base

It is then the analyst's task to carry out the last review, analysing the documents highlighted to confirm that the information selected by the engine is actually an item of interest: all news and documents that the analyst considers to be pertinent therefore become **evidence**, and can be inserted in a virtual dossier (or **Case**) in which to collect any useful information for the purposes of the analysis and of possible escalation activities of escalation.

KYC AND BAD NEWS DETECTION

With a rich set of features and the ability to semantically analyse any text, the **expert.ai Intelligence Platform** is an important tool for enriching and completing the KYC strategy of any financial organisation.

The solution can:

- Automatically capture large amounts of news from public information sources, specialised providers and internal repositories;
- Semantically analyse the content of news in Italian, English, French, Spanish and German (plus additional languages through special integrated machine translation services);
- Intelligently filter news, associating people, events and facts specifically related to illegal activities through a specific cataloging taxonomy to analyse Crime situations;
- Manage an archive of Targets (companies or persons under investigation) to be regularly monitored and generate alerts and reports when risk situations are detected. And on which to create alerts and reports when risk situations are detected.

Through expert.ai Intelligence Platform, it becomes possible:

- To make customer profile analysis activities during acquisition and onboarding faster and more effective through an interactive dashboard that allows the analyst to accurately identify information of interest through navigation and search tools that are extremely fast, effective and sophisticated;
- Activate systematic screening processes of the customer portfolio through appropriate integration with the company's systems and databases;
- Reduce the effort associated with manual research and analysis activities carried out by specialised personnel, making the process of analysing information on "bad news" more systematic and standardised
- reduce the economic, compliance and reputation risks that could derive from incomplete, superficial or non-systematic checks;
- increase the possibility of identifying and preventing risk situations by instantly intercepting information that could escape manual controls.

About us

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Natural Understanding

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